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From thought to action: Employee work engagement and job performance

Evangelia Demerouti and Russell Cropanzano

Over the past few decades, organizational scientists have shown that job performance is positively related to indicators of work adjustment, such as job satisfaction and psychological well-being. While these associations are generally consistent, however, we shall see that they are often of modest magnitude. In a like fashion, other scholars have found negative relationships between job performance and indicators of work-related health, such as burnout; once again the relationships are not large as one might intuitively expect. In this chapter, we will review this literature with a special focus on the relationship between work engagement and job performance. We argue that work engagement can be viewed as a positive indicator of work-related adjustment. Additionally, we shall also explore whether work

engagement shows similar pattern of relationships with performance as its negative antipode, burnout, as well as other positive indicators like job satisfaction and happiness.

After first defining “job performance” for the purposes of this chapter, we will present the lessons that we can learn from constructs related to work engagement, namely job satisfaction (representing a broad positive work experience) and burnout (representing the negative antipode of work engagement). Next we present empirical evidence examining the predictive value for direct indicators of work engagement. Instead of simply listing studies containing relevant evidence, we pay special attention to theoretical approaches that can be used to explain the relationship between engagement and performance. More

specifically we will focus on the following frameworks: Schaufeli and Bakker's (2004) three-dimensional approach to work engagement, the job demands-resources model, the conservation of resources theory, the happy productive worker thesis, and the broaden-and-build theory. We will argue that because work engagement captures both the "can do" and "will do" dimensions, it will tend to have stronger effects on job performance than other related constructs. The chapter will close with suggestions for future research in order to enhance our understanding on the relationship between work engagement and job performance.

What is job performance?

A moment's thought about the different jobs one has experienced is sufficient to illustrate how difficult it is to find an overall definition of performance that is applicable across jobs and even across situations. People work on innumerable tasks, and some of these do not even appear in formal job descriptions. When reviewing the engagement literature, the problem is magnified since different research traditions define "performance" in different ways. As we shall see, scholars exploring happy/productive workers have generally contented themselves with a single dimension of "overall" performance, whereas scholars exploring the conservation of resources (COR) model have designated three distinct performance factors. Given this theoretical complexity, it should not surprise us to find that scholars did not formulate precise definitions of performance until the 1990s (see especially, Campbell, 1990; Kanfer, 1990; Roe, 1999).

These different approaches refer to the *process* of performance, the *outcome* of performance, or both. The *process* approach focuses on the particular actions or behaviors that people undertake to achieve performance or what individuals do in their work situation (Roe, 1999). In our job as researchers, for example, a process definition would include such things as reading scientific literature, writing research proposals, and conducting studies. The *outcome* approach defines performance with respect to the products or services that are produced and whether these are

consistent with the overall strategic goals of the organization (Roe, 1999). For example, an outcome important to researchers is the generation of scientific articles. In the present review, we will refer to outcome of performance, usually in the form of performance ratings. The main reason for this choice is practical. This is the way performance is defined in the literatures we examine here.

More specifically, and whenever the literature we are reviewing allows, we divide performance into its in-role and extra-role dimensions (for reviews, see Hoffman, Blair, Meriac, & Woehr, 2007; Organ, 1988). *In-role* performance is defined as those officially required outcomes and behaviors that directly serve the goals of the organization (Motowidlo & Van Scotter, 1994). In-role performance emphasizes the instrumentality of individual performance for organizational goals. While this is certainly very important, it does not describe the whole range of human performance at work. Every employee also displays (or should also display!) extra-role behaviors (Morrison, 1994). *Extra-role* or *contextual* performance is defined as discretionary behaviors on the part of an employee that are believed to directly promote the effective functioning of an organization without necessarily directly influencing an employee's productivity (MacKenzie, Podsakoff, & Fetter, 1991). Extra-role performance includes organizational citizenship behavior but also refers to such aspects as personal initiative (Frese & Fay, 2001) and the constructive exercise of voice (Van Dyne & LePine, 1998) that indicate proactive behaviors towards the organization. Moreover, citizenship behavior can be directed toward the organization and towards individuals (Dalal, 2005; Ilies, Nahrgang, & Morgeson, 2007).

There is another distinction that is worth making. Most of the studies that we review measure performance at the individual level, such as when a supervisor rates a particular employee. However, this is only part of the story. Other studies assess performance at the unit level, such as through the use of archival data collected by the organization itself.

How are constructs similar to engagement related to performance?

Since the literature on work engagement was inspired by existing constructs, it seems important to present briefly the existing insight regarding how these constructs are related to performance. More specifically we will focus on job satisfaction and burnout. Job satisfaction is a broad construct that represents a positive attitude. It has been widely researched. On the other hand, burnout is the hypothetical antipode of work engagement. As one might expect, the relationship between burnout and performance parallels that between engagement and performance, though burnout runs in the opposite direction, of course. While for the job satisfaction–job performance relationship we will restrict ourselves to results of different meta-analyses, for the burnout–job performance relationship we will particularly concentrate on studies using the conservation of resources theory. The reason is that this theory was successful in explaining the mechanism linking burnout and performance, and gaining insight into the underlying mechanisms is the ultimate aim of this chapter.

Job satisfaction

The elusive relationship between job satisfaction and job performance

Over the years, there has been considerable debate over the causal order between job satisfaction and performance and, even more fundamentally, whether a non-trivial association exists between these two variables. Scholars generally mark the start of the job satisfaction/performance debate with the publication of Brayfield and Crockett's (1955) review paper. Based on a qualitative summary of the available literature (meta-analysis was much in the future), these authors famously concluded that "satisfaction ... need not imply a strong motivation to outstanding performance" (p. 421). In fact, the reported correlation was a modest $+0.15$. Nine years later Vroom (1964) published his own review of the literature, reporting a median job satisfaction/performance relationship of $+0.14$.

As meta-analytic techniques became widely

available, scholars were quick to make use of them. Unfortunately, they did not obtain identical results. Petty, McGee, and Cavender (1984) found a sizable corrected association, $\rho = +0.31$, whereas Iaffaldano and Muchinsky's (1985) findings were less encouraging, $\rho = +0.17$. Both of these meta-analyses had detractors. Organ (1988) cautioned that the Petty et al. findings might be inflated due to their flexible definition of "performance". Specifically, Petty and his colleagues may have included measures of citizenship behaviors and these, in turn, could show a stronger relationship to satisfaction than actual job performance. On the other hand, Wright (2005) pointed out that the Iaffaldano and Muchinsky results are probably conservative. He notes that the well-known $+0.17$ relationship is actually an average that includes a number of facet measures (e.g., pay satisfaction, co-worker satisfaction, etc.). When one limits Iaffaldano and Muchinsky's findings to overall job satisfaction the correlated relationship is a respectable $+0.29$, very close to the $+0.31$ obtained by Petty and his colleagues.

In order to sort through these issues, a later meta-analysis was conducted by Judge, Thoresen, Bono, and Patton (2001), which paid careful attention to the earlier findings. These authors found a $\rho = +0.30$. This is, of course, almost identical to the Petty et al. (1984) findings, and equally close to the Iaffaldano and Muchinsky (1985) findings for overall job satisfaction. On the basis of these considerations, the previous skepticism regarding the relationship between job satisfaction and performance has largely been overturned. It seems that satisfaction, or at least overall job satisfaction, exhibits a correlated association to job performance that is in the low .30s (Wright, 2005).

Conceptual models relating job satisfaction to performance

Scholars sometimes reflected on why satisfaction should *not* be related to performance, rather than why it should be (e.g., Fisher, 1980). As this skeptical climate was not conducive to strong theory development, conceptual progress languished (Judge et al., 2001). The solid results obtained by

Judge and his colleagues, though, should inspire future inquiry. As a guide, these authors discussed seven possible models explaining the job satisfaction/performance correlation.

- Model 1: Job satisfaction causes performance.
- Model 2: Performance causes job satisfaction.
- Model 3: Job satisfaction and performance are reciprocally related.
- Model 4: Job satisfaction and performance are both caused by a common third variable. That is, the association is spurious.
- Model 5: The relationship between job satisfaction and performance is moderated by some third variable or variables.
- Model 6: There is no relationship between job satisfaction and performance.
- Model 7: Job satisfaction and/or performance need to be reconceptualized. For example, it could be that affect causes job performance and job satisfaction is (or causes) affect.

With the likely exception of Model 6, the null association, the other six models cannot be ruled out (Judge et al., 2001). In addition, the different job satisfaction/performance models presented here are directional. They do not necessarily specify explicit and testable psychological mechanisms. For these reasons we know less about satisfaction and performance than we would like. As Judge and his colleagues observe, much work is still to be done.

A different concern has been raised by Wright (2005), Lyubomirsky, King, and Diener (2005), and Zelenski, Murphy, and Jenkins (2008). While not gainsaying the meta-analytically derived estimate of the satisfaction/performance relationship, these authors compare the size of this association with that between performance and other measures, such as psychological well-being. They argue that well-being, or simply "happiness" is a more substantial predictor. We shall return to this possibility later in the chapter.

Burnout and the conservation of resources model

The conservation of resources (COR) model (Hobfoll, 1988) is a general theoretical framework for understanding workplace stress. The COR model centers on the idea of *resources*, defined "as those objects, personal characteristics, conditions, or energies that are valued by the individual or that serve as a means for attainment of these objects" (Hobfoll, 1989, p. 516). There are a number of potential resources that can benefit an individual, including such things as social support (Halbesleben, 2006), autonomy, and involvement in decision-making. These resources are highly prized because they help individuals cope with job demands. Job demands include a number of things, such as daily hassles and role stress. To guard against resource depletion, and the resulting inability to cope with job demands, individuals seek to acquire, protect, and stockpile resources for their future needs. Stress, and more specifically burnout, results when there is a loss (or threat of loss) of one's resources or when one's resources are insufficient to cope with demands (Hobfoll & Freedy, 1993).

Early applications of the conservation of resources model to burnout

Overview of findings

In a theoretical paper, Hobfoll and Freedy (1993) argued compellingly that the conservation of resources model was a useful framework for understanding burnout (see also Halbesleben, 2006). One of the first attempts to use the COR framework to understand the burnout/performance relationship can be found in a longitudinal study conducted by Wright and Bonett (1997a). They measured Maslach and Jackson's (1986) three components of burnout: emotional exhaustion, depersonalization, and diminished personal accomplishment. Two years later they collected performance ratings. Even after the passage of time, the correlation between emotional exhaustion and performance was a healthy, $r = -.31$. Depersonalization and diminished personal accomplishment, however, were not significant predictors. Following up these findings, Wright

and Cropanzano (1998) dropped the two nonsignificant predictors – depersonalization and diminished personal accomplishment – and examined the predictive value of emotional exhaustion. As with the Wright and Bonett (1997a) study, exhaustion was significantly related to performance ($r = -.27$), though job satisfaction was not ($r = .11$). Emotional exhaustion also predicted voluntary turnover a year later ($r = .34$), but not job satisfaction ($r = -.05$). A final attempt to apply the COR model to the emotional exhaustion/performance relationship was less successful. Wright and Bonett (1997b) found that emotional exhaustion did not predict performance ratings.

This early stream of research helped establish that burnout, or at the very least emotional exhaustion, is a useful predictor of performance ratings. It may also be superior to job satisfaction, given the findings of Wright and Bonett (1997a) and Wright and Cropanzano (1998). Still, these early applications of the COR model were limited because they did little to investigate important psychological mechanisms implied by the theory. Most notably, the aforementioned work made scant effort to test process predictions. Additionally, this line of inquiry places great emphasis on emotional exhaustion but less on other more attitudinal dimensions of burnout (Wright & Bonett, 1997a, being an exception). As we shall discuss in the next section, more recent work by Halbesleben and Bowler (2005, 2007) has moved to address these issues.

Contemporary applications of the conservation of resources model

In applying the conservation of resources model to burnout, Halbesleben and Bowler (2005) began by considering their predictor (burnout) and their criterion (performance). Building on Demerouti, Bakker, Nachreiner, and Schaufeli (2001), they rejected Maslach and Jackson's (1986) three-factor structure and limited burnout to a pair of dimensions – emotional exhaustion and disengagement. They also divided job performance into three parts: in-role job performance, organizational citizenship behaviors directed toward the organization (OCB-O), and

organizational citizenship behaviors directed toward individuals (OCB-I).

Halbesleben and Bowler (2005) maintained that there is a causal path from exhaustion to disengagement, such that the former engenders the latter. Consonant with the COR framework, they then asserted that motivation is a beneficial resource. When people experience burnout they need to target their resources, including motivation, in order to get the maximal return. Thus, employees need to conserve in some areas and expand in others.

- Since individuals are exhausted, they tend to put less effort into their work. Hence, the relationship between emotional exhaustion and in-role job performance should be negative. Disengagement should be unrelated to in-role performance, as suggested by Wright and Bonett (1997a).
- Since individuals are exhausted and disengaged from the work environment they should seek to conserve energy and separate themselves from the organization. Hence, both emotional exhaustion and disengagement should be negatively related to OCB-O.
- Social support helps to reduce burnout (Halbesleben, 2006). As exhausted individuals are more in need of social support than their less exhausted counterparts, they will wish to maintain and not to jeopardize their interpersonal relationships. Thus, exhaustion should be *positively* related to OCB-I. Of course, disengaged workers are unconnected from others. Thus, disengagement should be *negatively* related OCB-I, as it is to OCB-O.

In an initial study, Halbesleben and Bowler (2005) found strong support for their model. Building upon these ideas, Halbesleben and Bowler (2007) next limited their focus to emotional exhaustion and the three productive families of behavior: in-role performance, OCB-O, and OCB-I. Dropping disengagement, they argued that there are three types of “strivings”, or reasons, why individuals will work hard. *Achievement striving* pushes one to higher in-role performance, *status striving* pushes one to higher

OCB-O, and *communion striving* pushes one to higher OCB-I. All of the associations between strivings and productive work behavior are positive. Emotional exhaustion raises or lowers productivity by impacting these strivings. Thus, when exhausted workers are forced to conserve their motivational resources, they decrease their achievement and status strivings. This, in turn, lowers in-role performance and OCB-O, respectively. However, in an effort to build and maintain strong interpersonal relationships emotionally exhausted employees *increase* their communion striving. This, in turn, boosts OCB-I. Halbesleben and Bowler's empirical test was generally supportive.

How and why is engagement related to performance?

It is unfortunate for such an important topic that much of the empirical evidence on the relationship between work engagement and performance indicators is of recent vintage, often restricted, and unintegrated across conceptual traditions. The studies that we could locate are theoretically diverse, employing a number of distinct conceptual frameworks. They are also methodologically rich, several are cross-sectional but others are longitudinal and a few even use experience sampling techniques. As alluded to above, there is a good deal of variability on the criterion side as well, with some using overall measures of performance, other dividing performance into in-role and extra-role, and a few others even divided extra-role performance into subdimensions. Rather than shoehorning this work into an artificial taxonomy, we have decided to let the original scholars speak for themselves and describe each study within its own theoretical tradition. This approach should help the reader to understand the available evidence within its original context. Moreover, this narrative structure should also afford us an opportunity to sharpen the differences between the various conceptual approaches.

The Schaufeli and Bakker (2004) three-component model of engagement

Work engagement is a positive and fulfilling state of mind, which is characterized by vigor,

dedication, and absorption (Schaufeli & Bakker, 2004). *Vigor* refers to high levels of energy and mental resilience while working. *Dedication* pertains to feelings of significance, enthusiasm, inspiration, pride, and challenge. *Absorption* implies being fully immersed in one's work so that time flies and one has difficulty detaching oneself from one's work (see also May, Gilson, and Harter, 2004, for a comparable conceptualization of work engagement). Schaufeli and Bakker (2001) found that engaged employees take greater initiative and generate their own positive feedback. In short, engaged employees have high levels of energy and are enthusiastic about their work (see also May et al., 2004).

Schaufeli and Bakker developed their own instrument to measure work engagement, the Utrecht Work Engagement Scale (UWES; Schaufeli & Bakker, 2003; Schaufeli, Martinez, Marques Pinto, Salanova, & Bakker, 2002; see also Chapter 2, this volume). The UWES includes items for the assessment of the three engagement dimensions included in Schaufeli et al.'s definition: vigor, dedication, and absorption. Using this instrument, Schaufeli and colleagues tested the relationship between engagement and job performance in two studies. Schaufeli, Taris, and Bakker (2006) examined the relationship between trait work engagement and job performance. This cross-sectional study was conducted among a large and heterogeneous dataset of Dutch employees representing the Dutch workforce as a whole. In this study Schaufeli et al. found that work engagement was positively related to in-role performance ($\gamma = .37$), extra-role performance ($\gamma = .32$) and innovativeness ($\gamma = .37$) whereas workaholism was not. Interestingly, employees who work excessively hard and who work compulsively (i.e. workaholics) exhibit greater extra-role performance.

Expanding work engagement in the context of education, it has been shown that engaged students are more likely to pass their exams during subsequent semesters (Schaufeli et al., 2002). Using a sample of Spanish, Dutch, and Portuguese students, Schaufeli and his colleagues created a ratio of exams passed relative to the total number of exams taken. This ratio was higher for

those reporting high levels of vigor. The ratio was also positively related to the burnout dimension of professional efficacy. Findings held irrespective of country, suggesting that that work engagement could predict academic performance of students.

The job demands-resources model

The job demands-resources model (JD-R; Demerouti et al., 2001) is a comprehensive framework for understanding the antecedents of health and motivation as well as their consequences including job performance. A unique feature of the JD-R is that it poses two parallel processes. The first is a health-impairment process (what workers *can* do) and the second is a motivational process (what workers *will* do).

To understand these twin processes, it is helpful to distinguish between two sets of antecedents, job demands and job resources. *Job demands* are those aspects of the work that require effort on the part of the employee. Because of this effort, job demands are associated with psychophysiological costs such as exhaustion. They have the potential to impair health and thereby reduce performance. *Job resources* are those aspects of work that are functional to achieving goals, that minimize the effects of job demands, or stimulate personal growth. Because of these benefits, job resources are the hypothetical antecedents of motivation or engagement.

The JD-R model employs a two-dimensional conceptualization of burnout that is reflected in the Oldenburg Burnout Inventory (OLBI; Demerouti & Bakker, 2008). The first dimension ranges from exhaustion at the negative pole to vigor at the positive pole. The second dimension ranges from disengagement at the negative pole to engagement at the positive pole. This instrument was originally developed to assess burnout, but includes both positively and negatively phrased items, and hence, it can be used to assess work engagement and is therefore relevant to our present review (cf. González-Romá, Schaufeli, Bakker, & Lloret, 2006; Demerouti, Mostert, & Bakker, in press).

The assumptions of the JD-R model regarding these two processes have been supported

empirically. More importantly, Bakker, Demerouti, and Verbeke (2004) used the JD-R model to examine the relationship between job characteristics, burnout, and (peer-ratings of) performance. As anticipated, job demands (e.g., work pressure and emotional demands) were the most important antecedents of exhaustion. (In accordance with our earlier remarks, exhaustion was measured with vigor and exhaustion items.) In turn, exhaustion then predicted in-role performance. In contrast, job resources, such as autonomy and social support, were the most crucial predictors of disengagement. Disengagement, in turn, was a strong predictor of extra-role performance. In addition to these relationships, job demands were found to directly and positively affect in-role performance. In general, the model explained 8% of the variance in both peer-ratings of in-role and extra-role performance. These percentages are clearly higher than those reported in previous studies using other ratings of performance (about 1%, Schaufeli & Enzmann, 1998).

The importance of job and personal resources to work engagement and consequently to performance was further demonstrated through three diary studies. First, Xanthopoulou, Bakker, Demerouti, and Schaufeli (2009) investigated how daily fluctuations in job resources (autonomy, coaching, and team climate) are related to employees' work engagement and financial returns. Forty-two employees working in three branches of a fast-food company completed a questionnaire and a diary booklet over five consecutive workdays. Day-level resources had a direct positive relationship with day-level work engagement. Engagement, in turn, predicted daily financial returns – i.e. the total amount of money earned within a particular shift.

Second, Xanthopoulou, Bakker, Heuven, Demerouti, and Schaufeli (2008) examined whether daily fluctuations in colleague support predict day-levels of self-reported job performance through self-efficacy and work engagement. Forty-four flight attendants filled in a diary booklet before and after consecutive flights to three intercontinental destinations. Results of multi-level analyses revealed that work engagement mediated the relationship between self-efficacy

and (in-role and extra-role) performance. In addition, colleague support had an indirect effect on in-role performance through work engagement. Interestingly, day-level work engagement showed similar positive relationships to both day-level in-role and extra-role performance.

These findings largely agree with the findings of another diary study by Sonnentag (2003) among a diverse sample of white collar workers. Specifically, she examined the relationship between day-level work engagement and two aspects of self-reported initiative: day-level personal initiative, and pursuit of learning (as two aspects of self-reported proactive behavior) over five consecutive days. It was found that work engagement helps employees in taking initiative at work and pursuing learning goals on a daily basis. In fact, work engagement mediated the relationship between recovery and proactive behavior.

To conclude, differentiating between in-role and extra-role performance as two specific performance dimensions increased the predictive value of burnout/work engagement experiences. A strength of the JD-R model is that it is relatively comprehensive, as it also explains how specific aspects of work environment, working through specific well-being indicators, influence various parameters of job performance.

Comparing the COR model to the JD-R model

Overall, Halbesleben and Bowler's COR (2005, 2007) framework shares much in common with the JD-R model. Both theories allow for an indirect path from emotional exhaustion to OCB, whereby the effect is at least partially mediated by disengagement, and both agree that disengagement is not directly related to in-role job performance. Finally, both frameworks acknowledge that physical exhaustion can lower effective work behaviors. However, the need to conserve resources appears to be more central to Halbesleben and Bowler's work, while the JD-R model posits a motivation path as well.

There are also a few differences. The COR model, and not JD-R, posits a direct path from emotional exhaustion to organizational citizenship behaviors. Another key difference lies in how

the two theories think about OCB. The COR model has two types of citizenship behaviors, OCB-O and OCB-I, whereas the JD-R model has but one. Among scholars of citizenship behavior, the structure of OCB is the topic of an ongoing scholarly debate. A complete review of this literature would take us far beyond our current chapter. Suffice it to say, the distinction between OCB-O and OCB-I has been subject to a good deal of recent study, though there is not yet consensus as to whether OCB is best thought of as one variable or two (cf., Dalal, 2005; Hoffman et al., 2007; Ilies et al., 2007).

The happy/productive worker thesis

Research on the happy/productive worker thesis asserted that "happiness", although a lay concept, can be operationalized in a number of different ways (for reviews see Cropanzano & Wright, 2001; Wright, 2005; Wright & Cropanzano, 2004, 2007). The most conceptually sound approach refers to individuals who are prone to experience positive affect while also tending not to experience negative affect. This dimension has been studied under such names as subjective well-being (Diener, Suh, Lucas, & Smith, 1999), emotional well-being (Diener & Larsen, 1993), and psychological well-being (Cropanzano & Wright, 2001; Wright & Cropanzano, 2007). Wright and his colleagues argued that well-being, defined in this fashion, should be consistently related to job performance.

Evidence supported this contention. For example, among a small sample of human service workers, Wright, Bonett, and Sweeney (1993) found that employee-reported well-being predicted supervisory ratings of job performance collected a year later. This relationship was a sizable $r = +.42$. Later longitudinal studies obtained similar results, even with a range of control variables (Cropanzano & Wright, 1999; Wright & Bonett, 1997b).

The predictive value of well-being beyond job satisfaction

Wright (2005) has argued that well-being (or happiness) is a better predictor of job performance than is job satisfaction. Wright bases this

conclusion on the evidence reviewed earlier. The correlation between job satisfaction and performance, even when suitably corrected via meta-analysis, is about .30. This seems to be the rough lower bound for the well-being/performance relationship, which can be in the .40s or even lower .50s. To our knowledge, there have been no meta-analyses conducted on the well-being/performance relationship. Thus, the associations cited by Wright are uncorrected for measurement error.

A number of studies have examined the incremental contribution of well-being beyond that of job performance. For example, in two field studies Wright and Cropanzano (2000) used both satisfaction and well-being to predict performance ratings; well-being was significant in both samples ($B = +.19$, $B = +.20$), while job satisfaction was not significant in either. In a later longitudinal study, Wright, Cropanzano, Denny, and Moline (2002) found that well-being was associated with performance ratings collected a year later. This was so even when Time 1 performance, job satisfaction, positive affectivity, and negative affectivity were included in the prediction equation. However, in the full equation the association between job satisfaction and performance dropped to nearly zero. Similar findings were also obtained in a recent experience sampling study by Zelenski et al. (2008). More research is needed on this topic, but the available evidence is consistent with Wright's (2005) suggestion that (a) happiness – defined as well-being – predicts job performance, and (b) it does so better than job satisfaction.

The predictive value of well-being beyond emotional exhaustion

A much smaller literature has compared well-being or happiness to emotional exhaustion. Wright and Bonett (1997b) compared emotional exhaustion to well-being. They found that well-being ($r = +.48$) but not emotional exhaustion ($r = -.12$) predicted job performance ratings 2 years after these measures were taken. When emotional exhaustion and psychological well-being were simultaneously used to predict performance, the relationship of well-being was significant ($B = +.24$), while that of exhaustion was not ($B = -.10$).

The studies reviewed here would seem to argue

for the predictive value of psychological well-being. However, we are hesitant to say that they argue *against* the predictive value of burnout. It is dangerous to accept null results, such as those for exhaustion reported by Wright and Bonett (1997b). This is especially so, given that the sample sizes were modest, with $N = 44$ for Wright and Bonett and $N = 90$ for Wright et al. Given these considerations, it seems that more research is necessary on this topic.

The broaden-and-build model

Perhaps in response to the skeptical scholarly *zeitgeist* that surrounded early happy/productive worker research, initial investigations were more interested in establishing that a relationship did exist and less concerned with establishing why it might occur. Subsequent to this, a number of scholars (e.g., Wright, 2005; Wright & Cropanzano, 2007; Zelenski et al., 2008) have attempted to address this conceptual need. In so doing, proponents of the happy/productive worker thesis have tended to draw from Fredrickson's (2001, 2003) broaden-and-build model.

Fredrickson's (1998, 2001) work begins with the recognition that discrete emotional states automatically predispose us to certain classes of actions. For example, when embarrassed human beings tend to cover their faces, when angered we seek to attack, when frightened we attempt to withdraw from the threatening situation, and so on. The close link between emotion and action predispositions is well-documented and has long been known among emotion researchers (e.g., Ekman, 1992; Mascolo & Griffin, 1998; Mascolo & Harkins, 1998). Fredrickson's insight was to expand upon this point. As has been so often true in the history of psychological science, research on behavioral dispositions has tended to emphasize negative emotional states, such as rage, disgust, shame, and so on. Less work has emphasized the action tendencies associated with positive emotions (Fredrickson & Branigan, 2001, 2005).

According to the broaden-and-build theory of positive emotions (Fredrickson, 2001), certain positive emotions, including joy, interest, and contentment, all share the capacity to broaden

people's momentary thought-action repertoires and build their personal resources (ranging from physical and intellectual resources to social and psychological) through widening the array of thoughts and actions that come to mind. For instance, joy broadens resources by creating the urge to play and be creative. Interest, another positive emotion, fosters the desire to explore, assimilate new information and experiences, and grow. Evidence for the broadening hypothesis has been reported by Fredrickson and Branigan (2005) and by Isen (2000). Accordingly, positive affect produces a broad and flexible cognitive organization as well as the ability to integrate diverse material. There are other benefits as well. Fredrickson (2003) suggests that positive emotion tends to encourage employee development, such as learning new skills and forming closer interpersonal relationships. It also fosters reasonable levels of risk taking and constructive responses to negative feedback (Wright, 2005; Wright & Cropanzano, 2007). Positive emotion also facilitates the use of cooperative interpersonal tactics and reduces workplace conflict (Barsade, Ward, Turnover, & Sonnenfeld, 2000).

The question is now whether this "broaden-and-build" effect will manifest itself in enhanced job performance, as one would assume because of the accumulation of personal resources. Fredrickson (2001, 2003) has argued that we need to investigate how (and whether) broadened thought-action repertoires are translated into decisions and actions. For example, in an organizational context, Fredrickson and Losada (2005) showed that when the ratio of managers' positive to negative emotions is relatively high, they ask more questions during business meetings, and their range between advocacy and questioning is broader (implying better performance).

Notice that the impact of emotions tends to accrue over time. Personal growth creates more positive emotion. This new wave of good feelings, in turn, produces still more efforts at individual development. In this fashion, well-being engenders a beneficial upward spiral with cumulative effects over time (Fredrickson & Branigan, 2005; Fredrickson & Joiner, 2002). The good news, of course, is that those high in well-being

tend to benefit well into the future. But there is a dark side to this analysis. Those low in well-being could tend to experience additional failures that, in turn, could cause their happiness to wane further (Wright, 2005; Wright & Cropanzano, 2004). In any case, the cumulating effects of well-being, regardless of whether they are positive or negative or both, may explain the persistent correlation between happiness and job performance obtained from a number of longitudinal studies (e.g., Cropanzano & Wright, 1999; Wright et al., 1993; Wright & Bonett, 1997b; Wright et al., 2002). This may also explain why well-being is able to predict performance even beyond the effect of daily mood states (e.g., Wright, Cropanzano, & Meyer, 2004).

While the broaden-and-build model has considerable promise, research on the happy/productive worker thesis has seldom tested the psychological mechanisms directly. In one recent study, Wright, Cropanzano, and Bonett (2007) argued that the broaden-and-build model maintains that those who are high in well-being are better able to appreciate positive life events. If this is so, they reasoned, then having a satisfying job will do little to improve performance for those low in well-being, but will be effective in boosting performance for those high in well-being. In other words, it follows from the broaden-and-build model that happiness and job satisfaction should interact, with job satisfaction related to performance only when well-being is high. Wright and his colleagues obtained evidence in support of this contention. In a later study, Zelenski and his colleagues (2008) argued that the broaden-and-build model allowed that either positive emotion or negative emotion could predict job performance. They found that positive affect – rather than negative affect – seemed to be the more important mechanism. This is consistent with the work of Fredrickson (2003).

The recent work of Wright et al. (2007) and Zelenski et al. (2008) represents a promising effort to explore psychological mechanisms. On the whole, though, work on the happy/productive worker thesis has tended not to directly test the tenets of the broaden-and-build model (though other evidence exists, see Fredrickson &

Branigan, 2005; Fredrickson & Joiner, 2002). This paucity of theory-based research is a limitation that we hope will be addressed by future scholarship.

Self-regulation and the episodic process model

Beal, Weiss, Barros, and MacDermid (2005) provide a theoretical basis for examining the impact of state engagement on daily performance. In contrast to traditional performance models that regard within-person differences as error variance, their *performance episodes* model focuses on an individual's variability in performance over short periods of time. Their main argument is that individuals perform better when fully concentrated on the task at hand. Specifically, Beal et al. propose that resource allocation to the task is crucial for successful performance. If employees cannot allocate all of their resources to the current task, for example because they are constantly interrupted by telephone calls, they cannot perform optimally. Thus, replenishing and conserving (self-regulatory) resources is critical for successful performance during performance episodes and during a day (see Beal et al., 2005). As Beal and his colleagues suggest, tasks that are interesting to employees make it easier for them to effectively regulate their attention toward the task, while ignoring potential distractions. Because engaged employees are, virtually by definition, dedicated to their work tasks they should be intrinsically motivated to perform these tasks and thus to focus their attention. Thus according to this perspective work engagement leads to better task performance because employees will be more willing to direct their attention and other personal resources towards the task. Notice that Beal et al.'s emphasis on strategically using personal resources is conceptually similar to Halbesleben and Bowler's (2005, 2007) COR model of burnout. The difference, and it is a significant one, is that Beal et al. take a *within-persons* approach, whereas Halbesleben and Bowler take the complementary *between-persons* approach.

Although not examining particular performance episodes, Bakker and Bal (in press)

concentrated on within-person performance during the working day. Bakker and Bal conducted their weekly diary study among teachers. They examined the relationship between daily job resources and day-levels of work engagement, as well as the relationship between day-level work engagement and day-level performance. Teachers were asked to fill in a diary questionnaire every Friday for five consecutive weeks. Performance represented a composite of in-role and extra-role performance as reported by each participant. Results showed that state levels of work engagement were fueled by job resources (like autonomy, exchange with the supervisor, and opportunities for development), and were predictive of in-role and extra-role performance ($\gamma = .42, p < .001$). These findings show how intra-individual variability in employees' work engagement can explain daily job performance.

Unit-level engagement

Thus far we have only considered engagement as an individual-level variable. However, as we discussed earlier, performance is often the result of the combined effort of many employees. It is therefore conceivable that the engagement of some team members could cross over, or impact, the engagement of others. In this way team engagement could be an emergent group-level phenomenon that has beneficial performance effects. We recognize that little research is currently available, but there are strong theoretical reasons to believe that unit-level engagement exists.

One possible mechanism is the so-called crossover or emotional contagion. Crossover or emotional contagion can be defined as the transfer of positive (or negative) experiences from one person to the other (Westman, 2001). If colleagues influence each other with their work engagement, they may perform better as a team. There is indeed some experimental evidence for such a process of emotional contagion. Barsade (2002) conducted an innovative laboratory study in which the transfer of moods among people in a group, and its influence on performance was examined. Using a trained confederate enacting mood, she showed that the pleasant mood of the confederate influenced (video coders' ratings of)

the mood of the other team members during a simulated managerial exercise (leaderless group discussion). The positive mood contagion consequently resulted in more cooperative behaviour and better task performance.

In the workplace, researchers have focused on emotional contagion viewed as a reciprocal emotional reaction among employees who collaborate closely. In one field study, Totterdell, Kellet, Teuchmann, and Briner (1998) found evidence that the moods of team members were related to each other even after controlling for shared work problems. In addition, Bakker, Van Emmerik, and Euwema (2006), in their study among 2229 officers working in one of 85 teams, found that team-level work engagement was related to individual members' engagement. This was so even after controlling for individual job demands and resources. Thus, engaged workers who communicated their optimism, positive attitudes, and proactive behaviors to their colleagues thereby created a positive team climate independent of the demands and resources to which they were exposed. This suggests that engaged workers influence their colleagues. Consequently, they perform better as a team.

Recent studies have also indicated that engagement is positively related to objective performance on the department or unit level. The first study providing evidence for this relationship was conducted by Salanova, Agut, and Peiró (2005). Using a sample of contact employees from restaurant and hotel service units, they showed that levels of work engagement were positively related to customer ratings of performance, through service climate. Employees' level of work engagement had a positive impact on the service climate of hotels and restaurants, with an increase in the empathy that employees showed towards their customers as well as the service that they provided.

Using an impressive dataset of almost 8000 business units in 36 companies, Harter, Schmidt, and Hayes (2002) examined the relationship between business-unit level employee satisfaction–engagement and the business-unit outcomes of customer satisfaction, productivity, profit, employee turnover, and accidents. It should be noted, however, that the measure that Harter

et al. used captures actually satisfaction with job resources (i.e., the hypothetical antecedents of work engagement) rather than the work engagement experience itself. Using meta-analysis technique they found that the correlations for overall satisfaction as well as for employee engagement were highest for customer satisfaction–loyalty (+.32 and +.33, respectively) and employee turnover (–.36 and –.30), followed by safety (+.20 and +.32), productivity (+.20 and +.25), and profitability (+.15 and +.17). Thus, both overall satisfaction and employee engagement showed a similar pattern of relationships with several parameters of business unit performance measured on the business unit level.

What do we learn from this review?

This chapter presents a short review that covers a lot of ground. The diverse theories discussed here signify that work engagement may lead to enhanced performance, but that it does so through different mechanisms. This suggests that the link between work engagement and performance is probably not straightforward and simple. Various intervening mechanisms might be involved in explaining this relationship. Whether the relationship is due to enhancement of resources (as broaden-and-build and COR theory would suggest) or to appropriate resource allocation (as self-regulation theories would suggest) or to an appropriate team climate remains still a matter of speculation. It is therefore worthwhile to try to operationalize and empirically test the possible mechanisms. An excellent example in this direction testing the mediators of the relationship between exhaustion and job performance is the study by Halbesleben and Bowler (2007).

For all the strength of the three-part model of work engagement, it seems that the vigor aspect of work engagement is most crucial for performance. Recall that among the three burnout dimensions, exhaustion (or lack of energy) shows the more consistent pattern of (detrimental) relationships with performance. This has also been highlighted by Shirom (2006), who views work engagement as merely consisting of energy-vigor, namely physical strength, emotional energy, and

cognitive liveliness. Moreover, measures of well-being include aspects of energy (or the lack of energy), alongside indicators of positive and negative feelings. Hence, measures of vigor or the absence of vigor (i.e., exhaustion) tend to be especially useful for predicting job performance. While our present case may be circumstantial, there is reason to believe that the vigor component of work engagement deserves special attention in the study of job performance.

Several of the reviewed studies applied an experience sampling design. These approaches are especially robust. Of course, they allow for the examination of differences between individuals. However, their unique strength is the ability to examine differences *within* individuals. They do so by following a set of people across days or situations or both. Evidence obtained from these studies raises the possibility that people may differ in the way in which they transform their work engagement into performance. These differences may be trait-like. Situations may have similar effects. It is also possible that different situations could transform feelings of work engagement into performance by way of different mechanisms. This would be state-like differences. For these reasons, experience sampling designs, such as diary studies, hold a special promise. Investigations employing this paradigm can allow scholars to cover trait-like and state-like differences in how engagement impacts job performance. The

studies by Xanthopoulou et al. (2008, 2009) represent excellent examples of this approach.

The role of individual characteristics, such as personality, in the engagement–performance relationship is understudied. However, it seems possible that some personality types are better able to transform their work engagement into increased performance than others. For instance, Demerouti (2006) found that flow at work (including components similar to work engagement, i.e., absorption, work enjoyment, and intrinsic work motivation) was beneficial for performance. However, this relationship only held for conscientious employees. For employees low on conscientiousness no relationship was found between flow and performance probably because they failed to invest their effort in beneficial tasks. Future studies examining the moderating effect of personality characteristics on the work engagement–performance relationship are therefore recommended.

The measurement of performance also seems to be highly relevant. As we saw, studies that succeeded in differentiating between specific performance dimensions were more successful in explaining variance in performance (examples are Bakker et al., 2004; Halbesleben & Bowler, 2007). Studies using global performance indicators (as those included in the review of Schaufeli & Enzmann, 1998) tended to do less well. This highlights that performance is not a uniform

Practical implications

An inevitable question after reviewing the relevant literature concerns the size of the relationship between engagement and job performance. It might be, for example, low and inconsistent, or perhaps no stronger than that of job satisfaction. On the other hand, the engagement–performance relationship could be stronger, perhaps as sizable as that between well-being and performance. Our impression is optimistic. It seems likely that work engagement could show relationships with performance that are similar in magnitude to those between well-being and performance. The explanation for this encouraging possibility can probably be found in the three-part configuration of work engagement, which includes energy (cf. vigor), motivational (dedication), and resource allocation (absorption) components. The additive value of these three components is greater than the independent effect of each.

This means for organizations that they should care for the work engagement of their employees. In order to create engaged and productive workforces organizations should conduct interventions focused on the empowerment of job resources because these have been found to promote personal resources and (consequently) work engagement. For instance, supervisors should provide a clear description of the tasks that the employees need to perform; they should provide employees with all the means that are necessary for achieving their tasks, and should set clear and objective standards to gauge employees' performance. In a related vein we saw in this review that the exhaustion component of burnout seems to play an antagonistic role with work engagement since it influences (in-role) performance unfavorably. Therefore, organizations should try to reduce or optimize job demands such that they do not have undesirable effects on employee health, for instance by providing ergonomic facilities for physical tasks, and variation between demanding and undemanding tasks. Thus for organizations it is important to promote work engagement and to minimize the risk for burnout such that they can obtain optimal performance from their employees.

construct and that work engagement is differentially related to different aspects of performance. Moreover, both the JD-R model and the COR model explicitly maintain that there are different psychological processes linking engagement to different performance dimensions. It is not trivial to suggest that we need more studies using objective measures of individual performance although we found several studies utilizing objective measures of unit performance.

Finally, the stimulus-organism-response explanations are inadequate to explain the relationship between work engagement and job performance. Rather, (work) environmental and individual experiences including work engagement seem to act as contingency factors affecting performance, which enhances the complexity of this phenomenon but also the challenge for both researchers and practitioners alike.

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